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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/017,392      | 12/18/2001  | Yuusaku Ohta         | 2001_1828A          | 6503             |

513 7590 11/30/2005

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| EXAMINER |
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TESLOVICH, TAMARA

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| ART UNIT | PAPER NUMBER |
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2137

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/017,392

Applicant(s)

OHTA ET AL.

Examiner

Tamara Teslovich

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This action is in response to the Applicant's Remarks and Amendments filed August 29, 2005.

Claims 1-22 are pending and herein considered.

### ***Response to Arguments***

Applicant's arguments filed August 29, 2005 have been fully considered but they are not persuasive.

In response to pages 14-19 of the Applicant's Remarks concerning independent claims 1 and 18 and Mathews' failure to teach wherein the authentication process is required after the encryption process, the Examiner would like to point to Page 4 of Applicant's Amendments. More specifically, the Examiner would like to point out the third full paragraph of claim 1 wherein it is specified "at least one authentication processing unit operable to perform the authentication processing in a data block unit of B2 bits in parallel to the encryption or the decryption process performed by said at least one encryption processing unit". This limitation clearly suggests that the authentication and encryption/decryption are done in parallel, and not sequentially as the Applicant contends in his arguments.

Accordingly, the Applicant's arguments concerning the data accumulation unit which is necessary to reduce the output from the encryption block before it is submitted to the authentication unit, are also moot in view of the limitation requiring the processes to occur in parallel.

In response to Applicant's arguments concerning claim 2 and Mathews' failure to teach wherein a packet would require both encryption and authentication processing, the Examiner once again brings attention to the limitations of claims 1 and 18 discussed above requiring the encryption and authentication to occur in parallel.

In response to the Applicant's remarks concerning new dependent claims 20-22, the Examiner once again points to the limitation of claim 1 requiring the encryption and authentication to occur in parallel therefore eliminating the need for a data block accumulation unit whose purpose is to accumulate data blocks *after* encryption and *before* authentication considering the two processes are set to occur at the same time. Each of these claims relies upon the use of the data block accumulation unit, which has been obviated by limitations in independent claims 1 and 18.

In view of the arguments previous, Examiner respectfully disagrees with the Applicant's argument that Mathews fails to disclose claims 1 and 18 in their entirety, and maintains the 35 U.S.C. 102(e) rejections corresponding to claims 1-2, 5-6, 13, and 17-20 as well as the 35 U.S.C. 103(a) rejections corresponding to claims 3, 4, 7, 8, 10-12, and 14-16 as provided in the previous office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1 and 18 fail to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed August 29, 2005. In that paper, applicant has stated

“the present invention provides a security communication packet processing apparatus and method that, relative to conventional systems, makes it possible to speed up processing, reduce delay of the processing, increase throughput for a packet which requires authentication processing after encryption processing (although the authentication value does not need to be encrypted)”, and this statement indicates that the invention is different from what is defined in the claim(s) because both claims 1 and 18 recite the limitation

“at least one authentication unit operable to perform the authentication processing in a data block unit of B2 bits in parallel to the encryption processing or the decryption processing performed by said at least one encryption processing unit”.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: It is unclear how the authentication and encryption can occur both in parallel and sequentially.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Teslovich whose telephone number is (571) 272-4241. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



T. Teslovich  
November 28, 2005

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER